

RAB[®] DESIGN

HELIX2-LED Area Light



The HELIX-LED is a highly versatile fixture designed with a full range of beam distribution options (Type II, III, IV, V), rotatable optics, glare control shields, and control options to create the perfect, most optimized lighting layout for your area. This standard fixture has all-in-one features including 120-347V, Colour Selection, and Lumen Adjustability.

The HELIX-LED Series is one of the most progressive area lights in the Canadian market that is dark sky friendly and listed on the DLC LUNA QPL.

IDEAL APPLICATIONS

- Parking Lot
- Pathway
- Schools
- Dealerships
- Commercial Plazas

SPECIFICATIONS

	LED240A180	LED300A240
PERFORMANCE		
Light Output	35250/30900/26500 lm	44300/39700/35300 lm
Efficacy	147 lm/W	
CCT	CCT Selectable - 3000K/4000K/5000K Dedicated CCT - 2200K, 2700K, 3000K	
Beam Distribution	Type II, Type III, Type IV, Type V	
LED Lifetime (L80)	90,000 Hours	
CRI	83	
B-U-G	B4-U0-G4	B5-U0-G5
ELECTRICAL		
Wattage	240/210/180 W	300/270/240 W
Voltage	120-347 V	
Surge Protection	6 kV Internal & 10 kV External per UL1449	
Power Factor	>0.99	
THD	2.3%	2.4%
Dimming	0-10 V (0-100%)	
Cable Specs	Input Power - 1m Cabtire Cable (SJOW 3x18 AWG) Dimming - 1m Cabtire Cable (SJOW 2x18 AWG)	
AMBIENT OPERATING TEMPERATURE		
Fixture	-40°C to 50°C (-40°F to +122°F)	
CONSTRUCTION		
Housing	Die-cast Aluminum	
Lens	Polycarbonate	
Paint Specs.	Weather and Corrosion Resistant Polyester Powder Coat Finish	
Housing Finish	Bronze, Custom Colours	

	LED240A180	LED300A240			
CERTIFICATIONS					
cULus Certified as per UL 1598 & CSA C22.2 NO. 250.0:21. IP65, Wet Location, DLC Premium, DLC LUNA*					
FACTORY INSTALLED CONTROLS					
DHFS Motion Sensor, PCLS Control, Twist Lock Photocell, 7 PIN Receptacle with Shorting Cap ANSI C136. 41-2013 compliant, 3 PIN Receptacle with Shorting Cap ANSI C136.10, 20 kV Surge Protection (120-277 V)					
OPTIONS SOLD SEPERATELY					
Slip Fitter, Direct Mount of Round/Square Poles, Non-Adjustable Direct Mount, Trunnion Mount, Yoke Mount, House Side Cutoff, Side Cutoff, DHFS Motion Sensor Remote Control, PCLS Remote Control					
DEFAULT SETTINGS					
CCT	4000K				
Wattage	240 W	300 W			
WEIGHT (FIXTURE ONLY)					
4.2kg (9.2lbs)					
MAX AMPERAGE DRAW (A)					
	120V	208V	240V	277V	347V
LED240A180	2.100	1.212	1.050	0.910	0.726
LED300A240	2.625	1.514	1.313	1.137	0.908
LUMEN MAINTENANCE					
	L90	L80	L70		
LED240A180	44,000 Hrs	90,000 Hrs	145,000 Hrs		
LED300A240	42,000 Hrs	85,000 Hrs	140,000 Hrs		

Life hours are derived from IESNA LM-80 testing report and projected per IESNA TM-21 calculations.

Electrical and Light Performance data is based on LM79 test report at 4000K and 120V.

*DLC LUNA listing applies to HELIX2-LED300A240 only



ORDERING GUIDE

HELIX2		H				DIM		
Fixture	Wattage	Voltage	Colour Temp.	Beam Distribution	Finish	Dimming	Controls	Surge Protection
HELIX2	LED240A180	H-120-347V	VK- CCT Selectable - 3000K/4000K ^a /5000K	T2 - Type II	BRZ - Bronze ^a	Dim - 0-10V Dimming	Blank - No Controls ^a	SP10 - 10kV Surge Protection ^a
	LED300A240		2.2K - 2200K ^d	T3 - Type III ^a	CST - Custom Finish		PC - Photocontrol	
			2.7K - 2700K ^d	T4 - Type IV			PCLS - Photocell CCT Lumen Sensor ^c	SP20 - 20kV Surge Protection ^b
			3K - 3000K ^d	T5 - Type V				
				T2R - Type II Rotated Right			3PIN - 3 PIN Receptacle	
				T2L - Type II Rotated Left			7PIN - 7 PIN Receptacle	
				T3R - Type III Rotated Right				
				T3L - Type III Rotated Left			DHFS - Dimming High Frequency Motion Sensor ^c	
				T4R - Type IV Rotated Right				
				T4L - Type IV Rotated Left				

a - Standard Configuration
 b - Available with 120-277V only
 c - One remote control needed for sensor (PCLS-RC107 & DHFS-RC100)
 d - Units qualify for DLC LUNA when ordered in fixed 2200K or 2700K or 3000K CCT and with a non adjustable direct mount arm

STOCK CODE

083720	HELIX2-LED240A180-H-VK-T3-BRZ-DIM-SP10
081708	HELIX2-LED300A240-H-VK-T3-BRZ-DIM-SP10

ACCESSORIES SOLD SEPARATELY

020036	YOKE MOUNT BRZ F/HELIX2 SELECT		020040	HELIX2 SELECT SIDE CUTOFF SHIELD BRZ	
020010	DIRECT MOUNT BRZ F/HELIX1/2		020039	HELIX2 SELECT HOUSE SIDE CUTOFF SHIELD BRZ	
020011	DIRECT TRUNNION MOUNT BRZ F/HELIX1/2		087016	RC-100 MOTION SENSOR REMOTE CONTROL	
020009	SLIP FITTER BRZ F/HELIX1/2		087034	RC-107 PHOTOCONTROL REMOTE CONTROL	
020041	NON ADJ DIRECT MOUNT BRZ F/HELIX1/2				

EPA (ft ²)			
	Tilt 0°	Tilt 45°	Tilt 90°
HELIX2	0.70	2.03	2.76
HELIX2 (with HCO)	0.97	2.03	2.76
HELIX2 (with SCO)	1.30	2.03	2.76

*EPA calculation includes both fixture and mounting

PHOTOCELL/CCT/LUMEN SENSOR (PCLS)

PCLS Controller allows the Installer to adjust colour temperature, brightness, and photocontrol settings using a remote control after installation.



PHOTOCELL/CCT/LUMEN SENSOR (PCLS)	
Input Power	LED Input: Max. 250VDC 3A; Sensor Input: 10-14VDC, >30mA
Input Current	Max. 25mA
Control Output	0-10V Output Signals
Operate Level	10-20LUX ON, 30-80LUX OFF
Ambient Temperature	99% RH
Operating Temperature	-40°C to +70°C (-40°F to +158°F)

RC107 REMOTE SEPCIFICATIONS (For PCLS Controller)			FEATURES
DEFAULT FACTORY SETTING			
Task Light Level	100%		ON: Turn on the fixture, brightness is set according to task level. OFF: Turn off the fixture, the fixture is permanently off. RESET: Task Light Level:100%; Hold Time: Disable; Photocell: Low; CCT:CCT Low (WW - 3000K) REPEAT: Send the same setting to different fixtures installed.
Hold Time	Disable		DIM+: With each push of the button, brightness increases by 10%. DIM-: With each push of the button, brightness decreases by 10%;
Photocell	Low		HOLD TIME: The "hold time" starts to count right after the fixture turns on. When the "hold time is up, the fixture adjusts to 50% brightness until the light control turns the light fixture off. DISABLE: When you choose disabled, the fixture maintains the task light level
CCT	CCT - WW (3000K)		LOW: When the ambient lux is less than 30lux, the fixture turn on at the task level you set, when the ambient lux is more than 50lux, the fixture turns off. MIDDLE: When the ambient lux is less than 80lux, the fixture turn on at the task level you set, when the ambient lux is more than 100lux, the fixture turns off. HIGH: When the ambient lux is less than 150lux, the fixture turn on at the task level you set, when the ambient lux is more than 180lux, the fixture turns off; DISABLE: Photoelectric switch disabled:
			CCT : Adjust CCT(WW - Warm White/3000K, NW - Neutral White/4000K, CW - Cool White/5000K)

Note: Custom settings can be done based on requirements in the Factory.

DIMMING HIGH FREQUENCY MOTION SENSOR (DHFS)

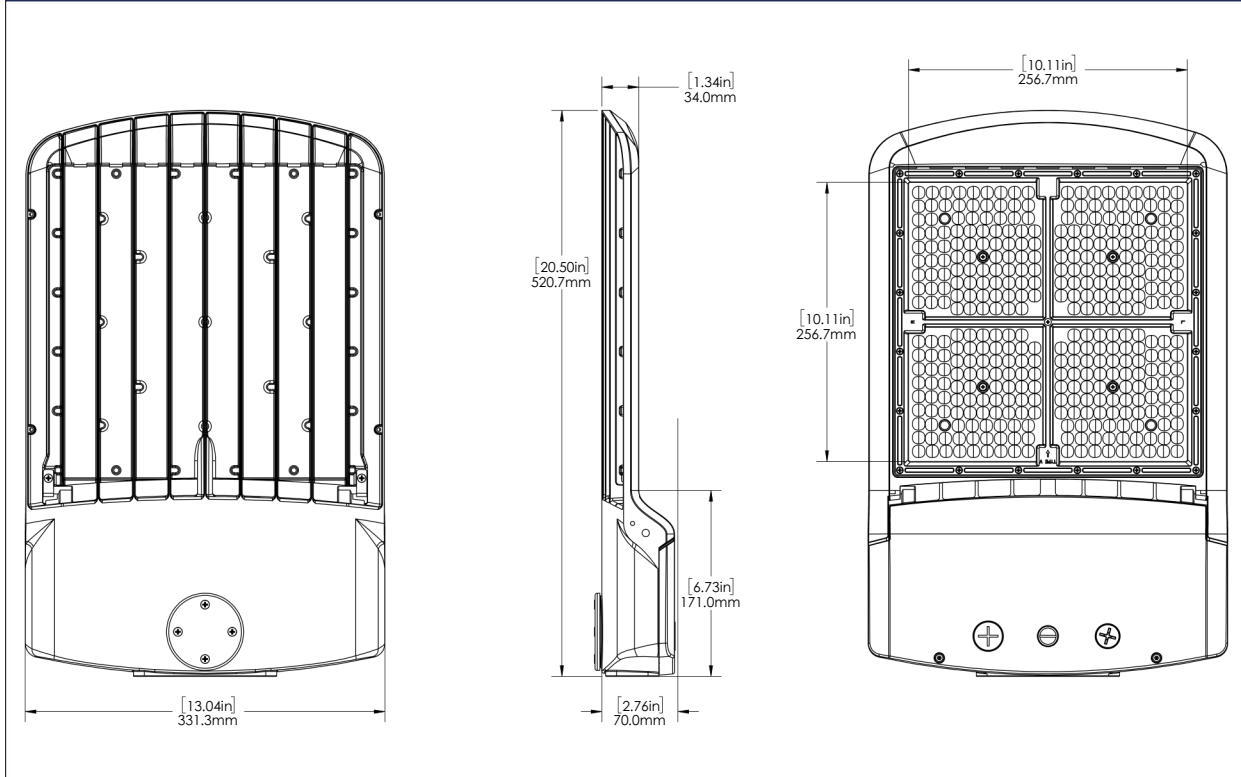
DHFS Microwave motion sensor offers a range of control features based on motion detection allowing the Installer to adjust the brightness of the fixture, hold time and daylight settings using a remote control after installation.

DIMMING HIGH FREQUENCY MOTION SENSOR (DHFS)	
Power Supply	12V-24V DC
High Frequency System	5.8GHz +/- 75MHz
Dim Control Output	0-10V, Max. 25mA Sinking Current
Detection Radius/Angle	Max. 26FT (8M)/360°
Mounting Height	Max. 40FT
Remote Range	50FT (15M) Indoor, No Backlight
Humidity	Max. 95% RH
Temperature	-40°C to +70°C (-40°F to +158°F)

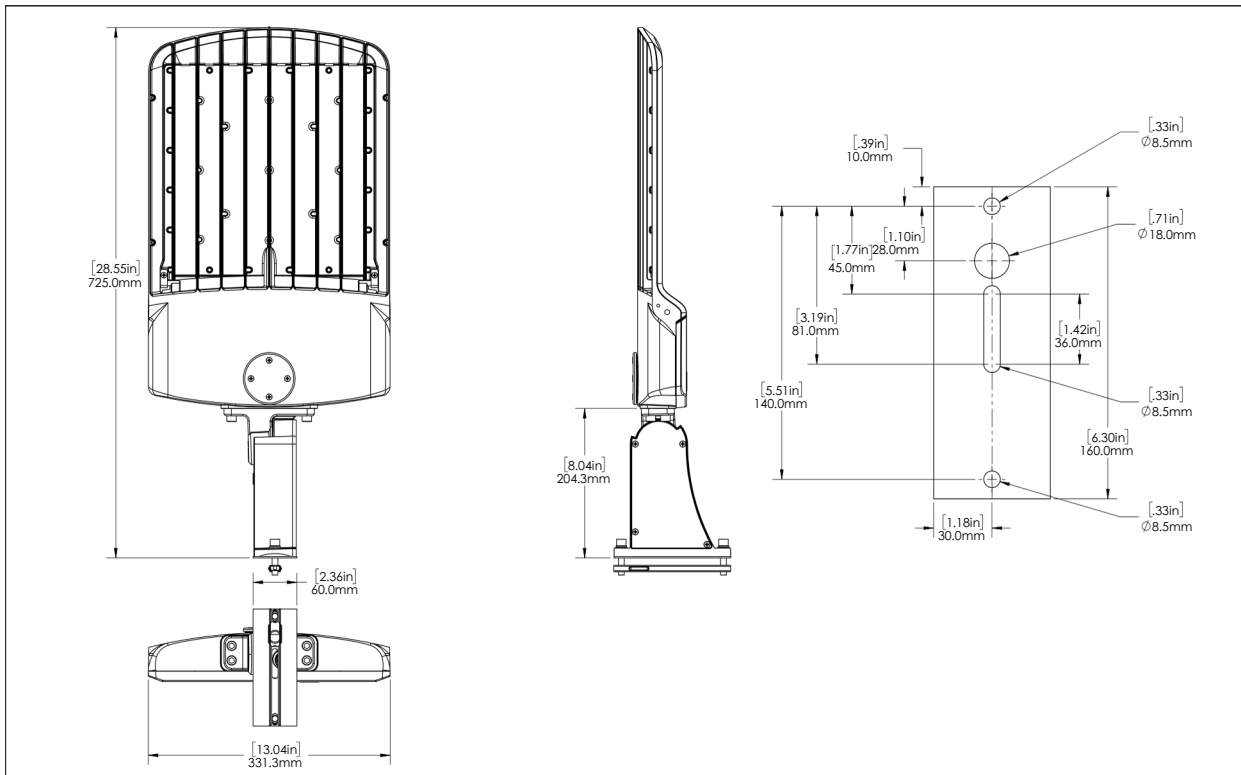


RC100 REMOTE SEPCIFICATIONS (For DHFS Controller)			FEATURES
DEFAULT FACTORY SETTING			
Brightness	100%		BRIGHTNESS: Sets the highest light fixture brightness when motion is detected.
Sensitivity	100%		SENSITIVITY: Sets the sensitivity to which the sensor will detect motion.
Hold Time	5 Mins.		HOLD TIME: The time the light fixture will remain at the brightness setting after it detects motion.
Daylight Sensor	☼		DAYLIGHT SENSOR: The lux setting that the light fixture will turn on/off. If the ambient lux is more than the defined lux setting, the fixture & sensor function will turn off and remain off until the ambient lux is below the setting. To disable the lux sensor, select the SUN icon. To set the lux to match current room conditions, select the EYE icon.
Stand-by Dim	30%		STAND-BY DIM: The Dim level that the light fixture will dim down after the Hold Time has expired. To disable dimming and only have ON/OFF, select the 0% icon.
Stand-by Time	60 Mins.		STAND-BY TIME: The time the light fixture will remain in the dim down state before it shuts off. To disable the light from shutting off, select the INFINITY icon.

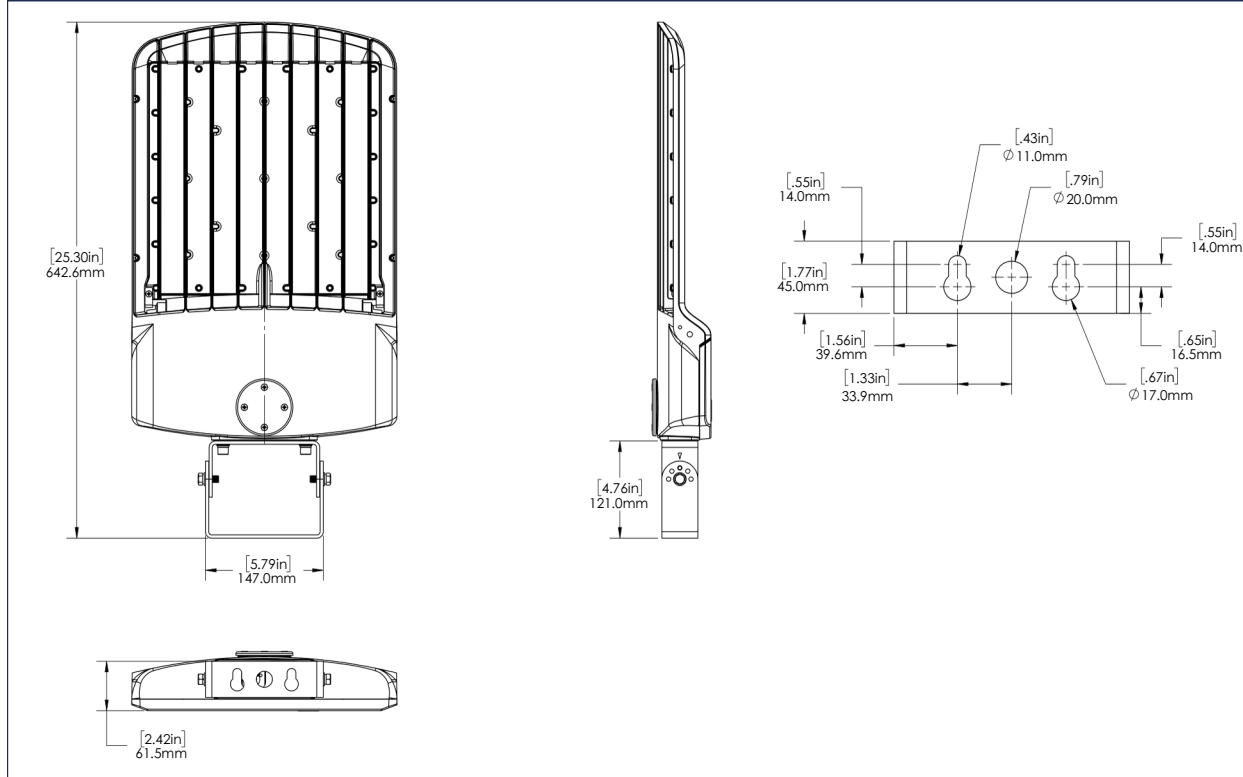
HELIX2 (WITHOUT MOUNTING)



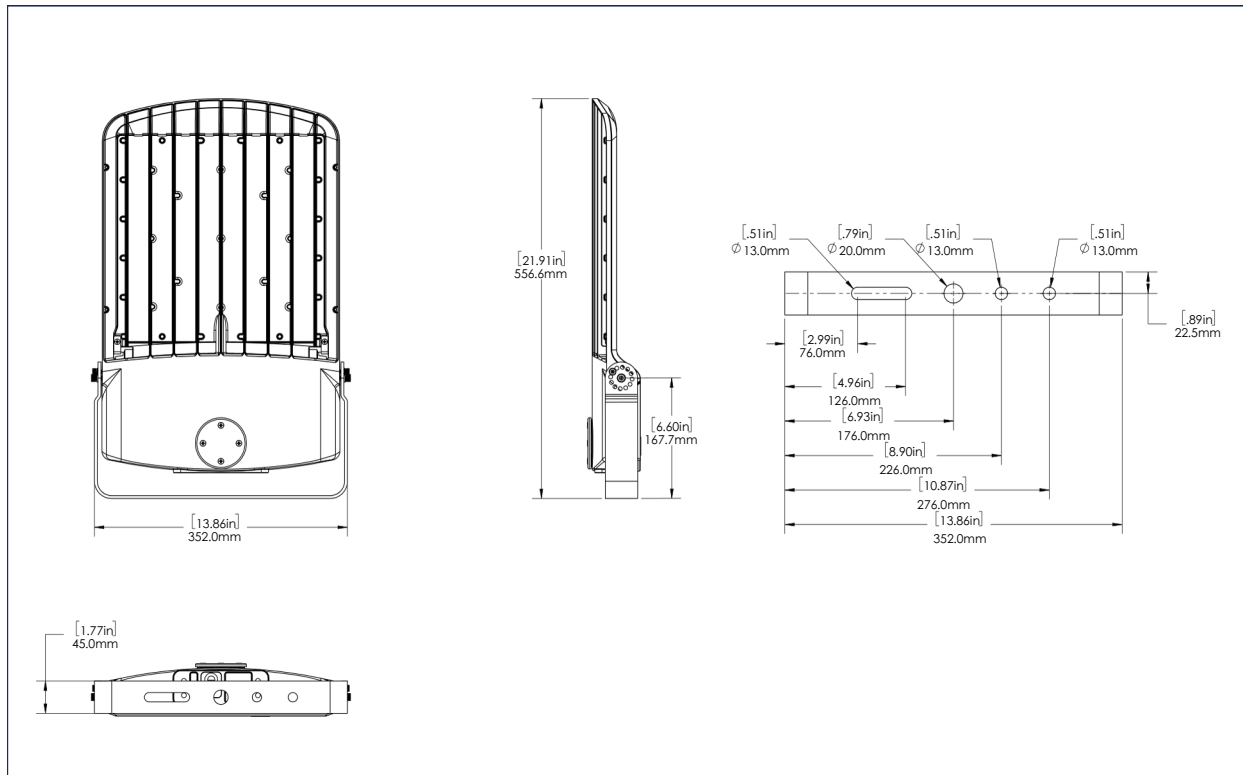
DIRECT MOUNT



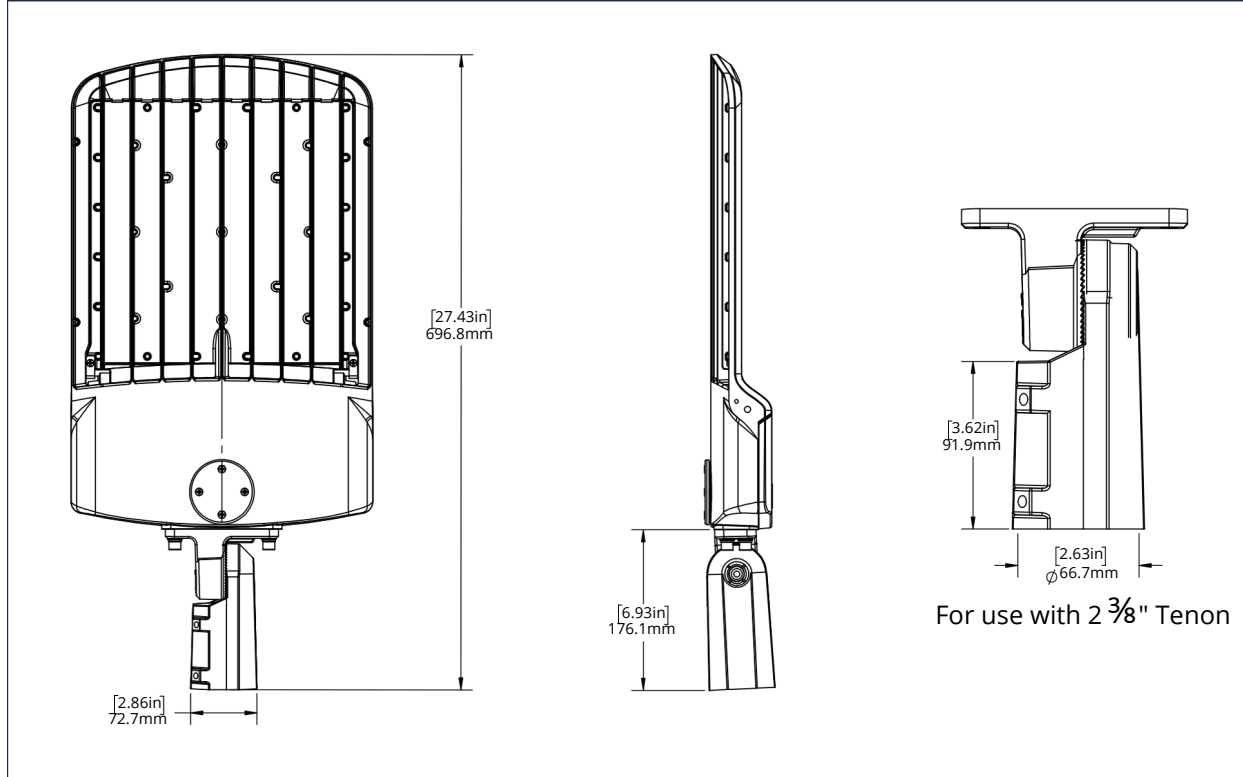
TRUNNION



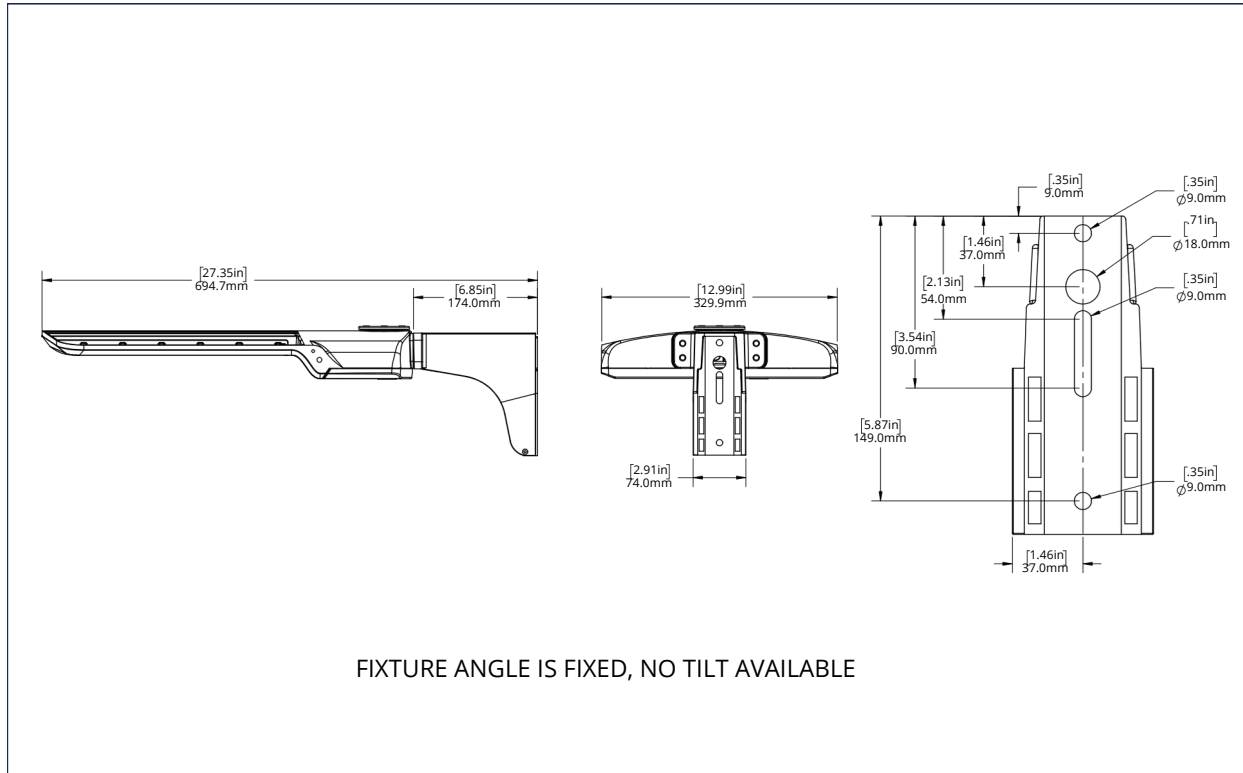
YOKE



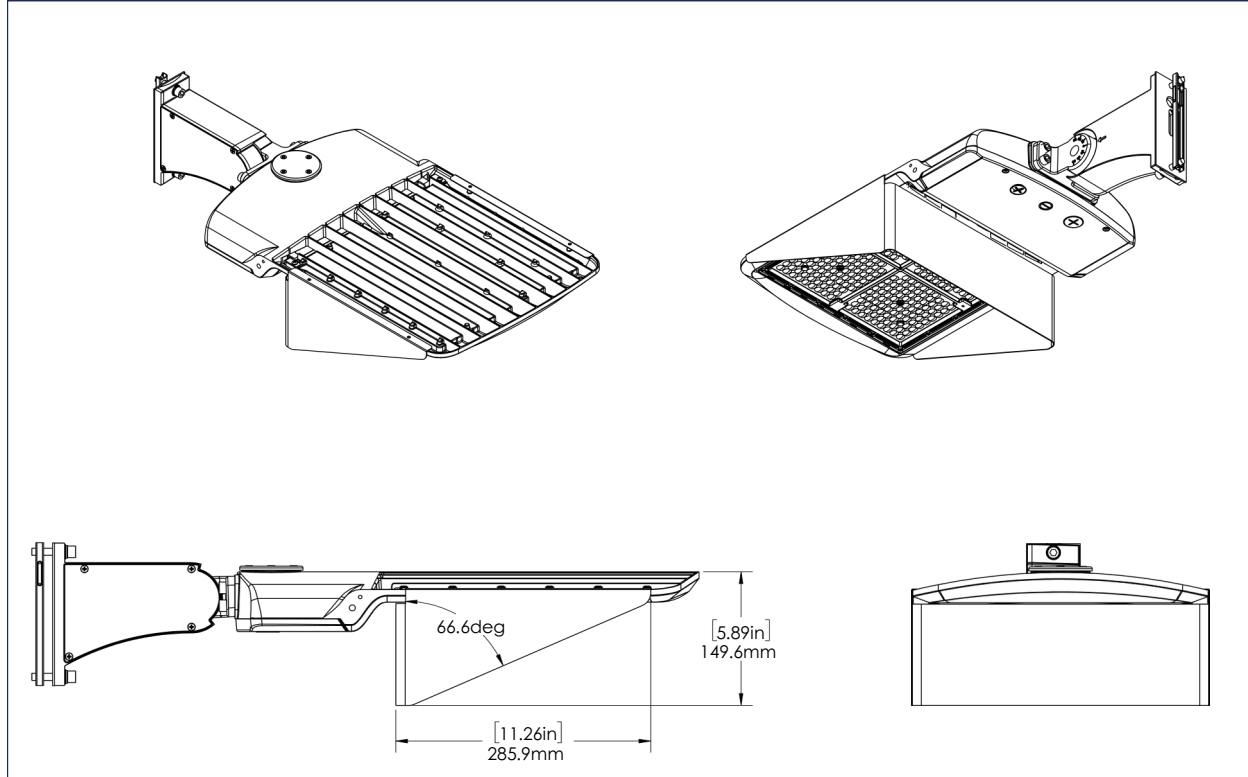
SLIPFITTER



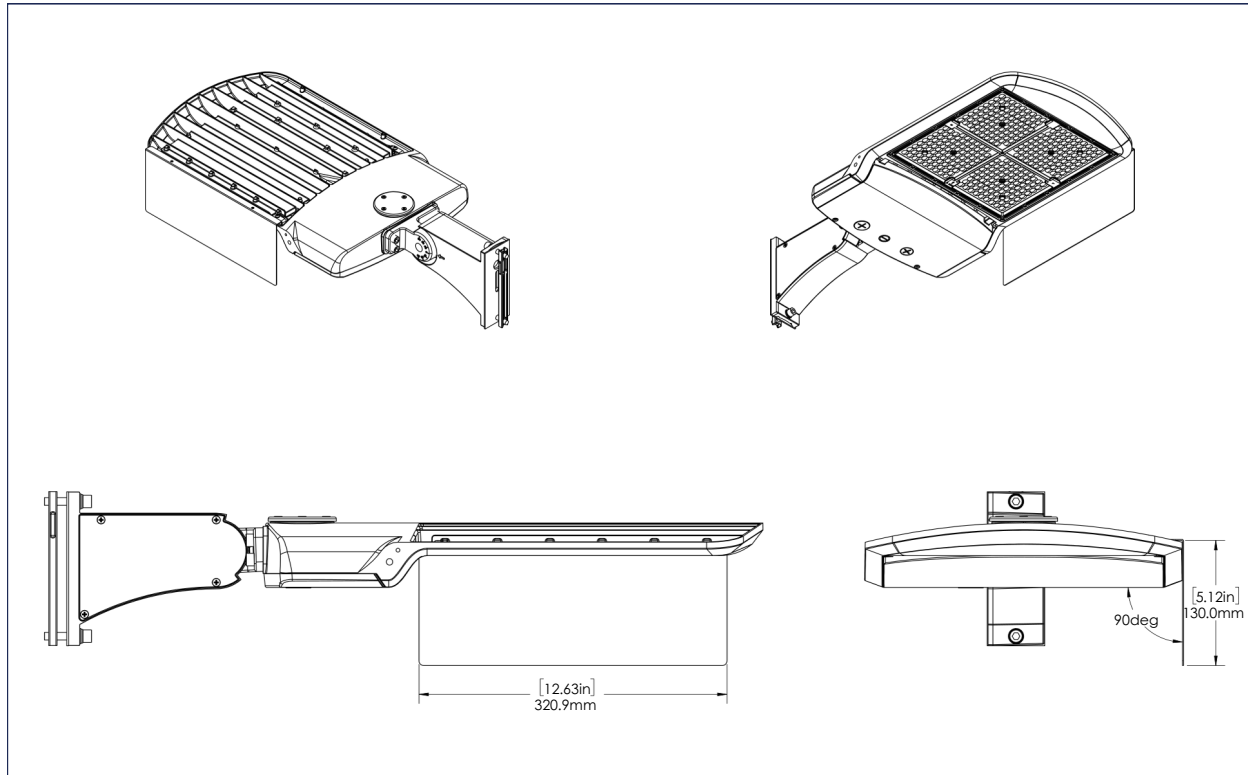
NON ADJUSTABLE DIRECT MOUNT



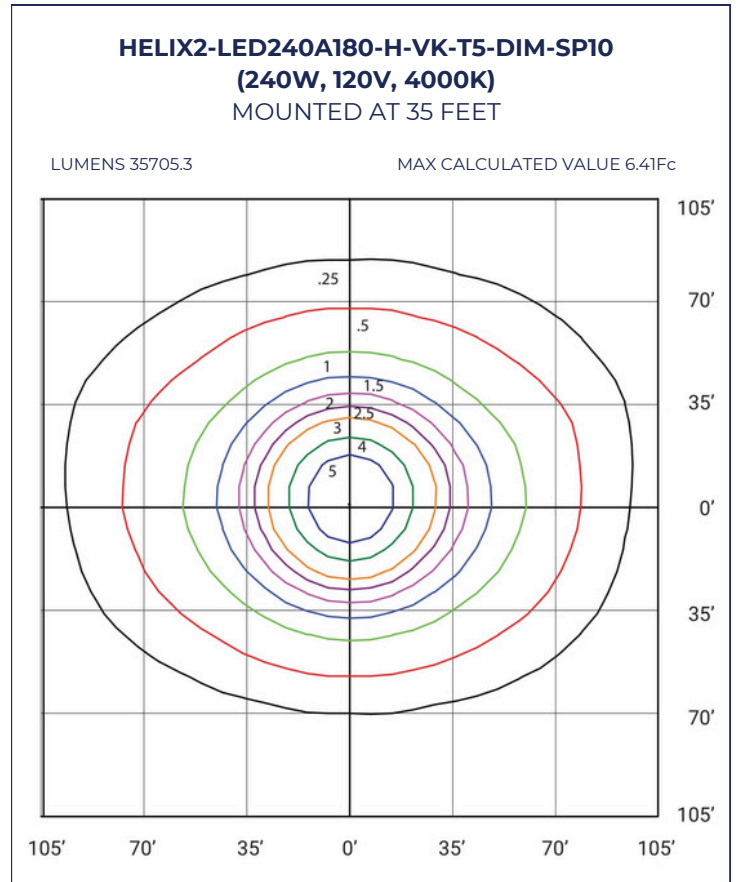
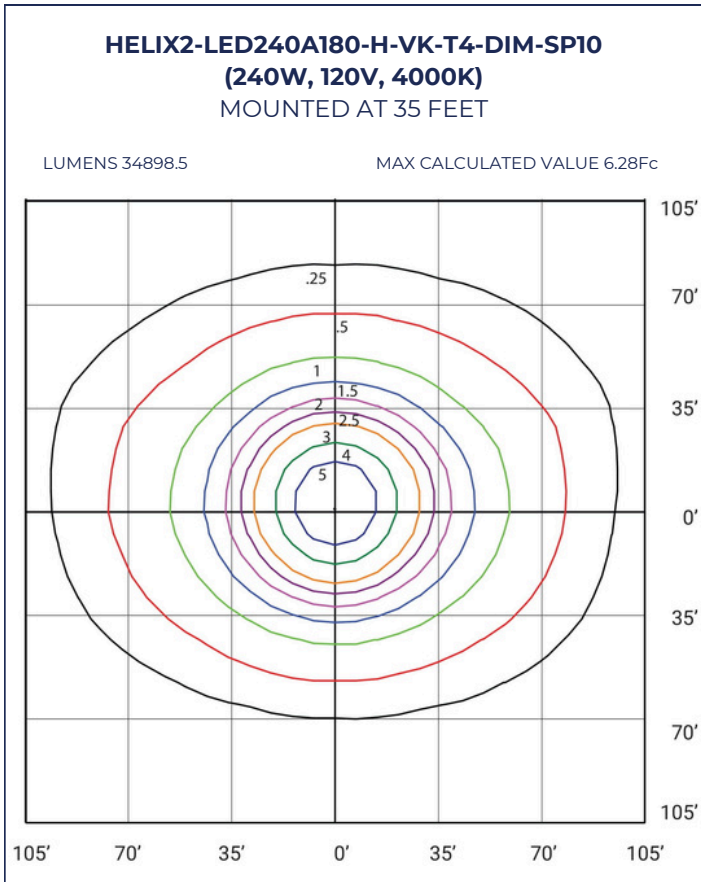
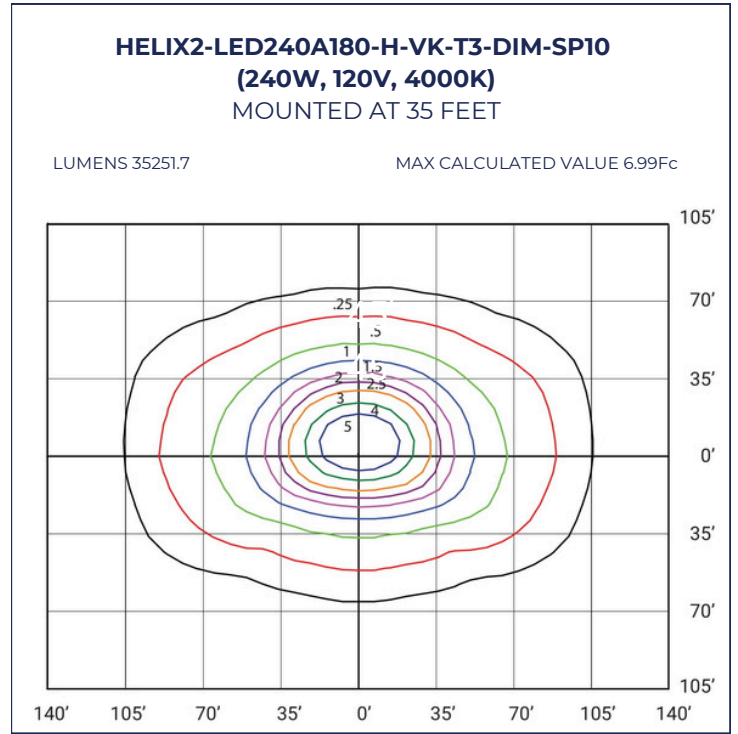
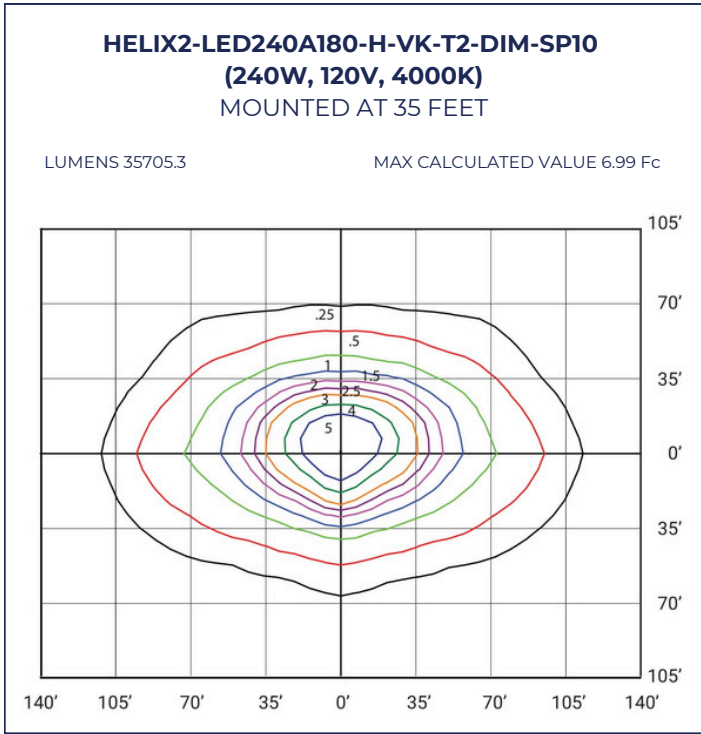
HELIX2 WITH HOUSE SIDE CUTOFF (HCO)



HELIX2 WITH SIDE CUT OFF (SCO)



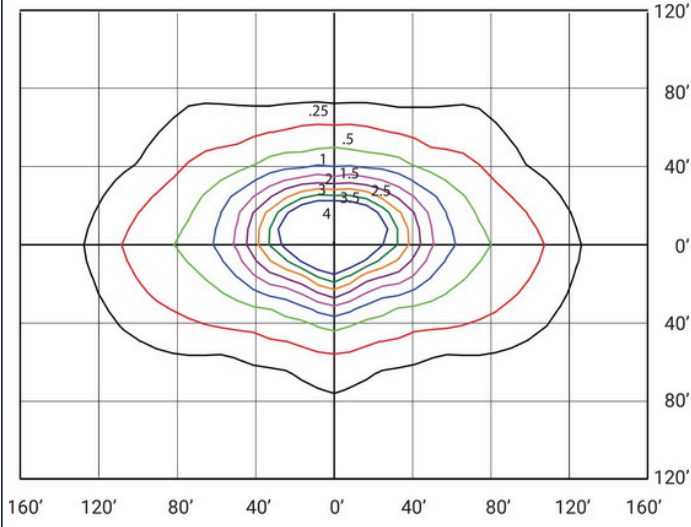
PHOTOMETRIC PLOTS



HELIX2-LED300A240-H-VK-T2-DIM-SP10
(300W, 120V, 4000K)
MOUNTED AT 40 FEET

LUMENS 43370.2

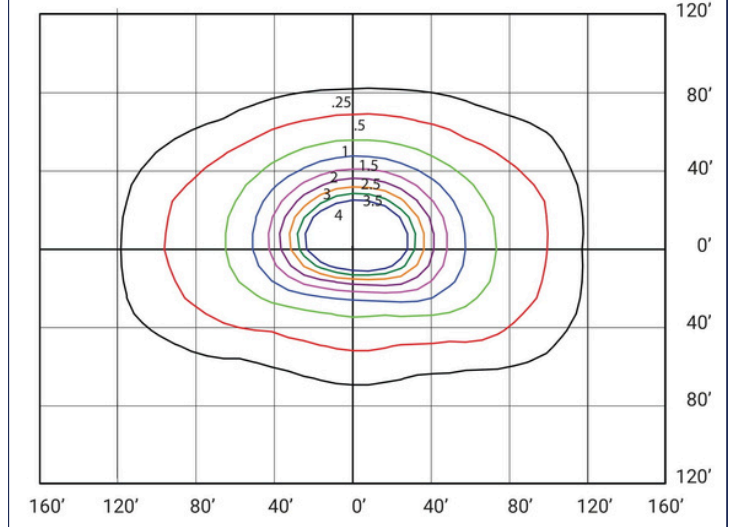
MAX CALCULATED VALUE 6.34 Fc



HELIX2-LED300A240-H-VK-T3-DIM-SP10
(300W, 120V, 4000K)
MOUNTED AT 40 FEET

LUMENS 44330.7

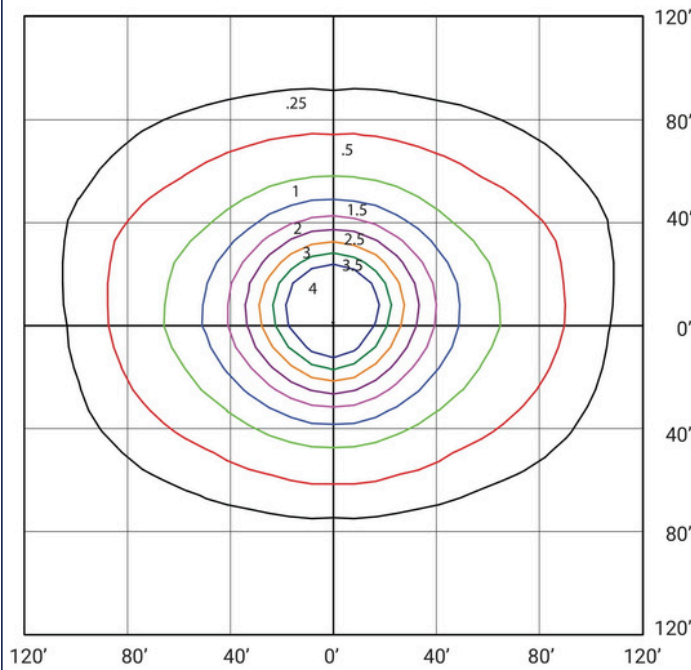
MAX CALCULATED VALUE 6.74 Fc



HELIX2-LED300A240-H-VK-T4-DIM-SP10
(300W, 120V, 4000K)
MOUNTED AT 40 FEET

LUMENS 43225.1

MAX CALCULATED VALUE 5.30 Fc



HELIX2-LED300A240-H-VK-T5-DIM-SP10
(300W, 120V, 4000K)
MOUNTED AT 40 FEET

LUMENS 44484.7

MAX CALCULATED VALUE 4.78 Fc

